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ABSTRACT

Designed to infuse career education with language arts and science, these teacher-developed activities for grades 7-12 are based on one of seven teacher competencies identified by an Oregon task force (see CE 019 665 for the project description). The activities in this document are based on teacher competency number 5: adopt, modify or create material which will help students understand the relationship of language arts/science areas to careers. The following four activities are included: (1) designing an inquiry to help students deal with career information; (2) job skills and school subjects; (3) matching school subjects with jobs; and (4) sourcebook for job information. The format of each activity identifies the competency covered by the activity; related competencies; grade level; instructional goal; number of people needed; time requirements; materials and resources needed; and procedures to be followed. (BM)

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# LANGUAGE ARTS & SCIENCE

## sample career education activities

## grades 7-12

**INSTRUCTIONAL MATERIALS**

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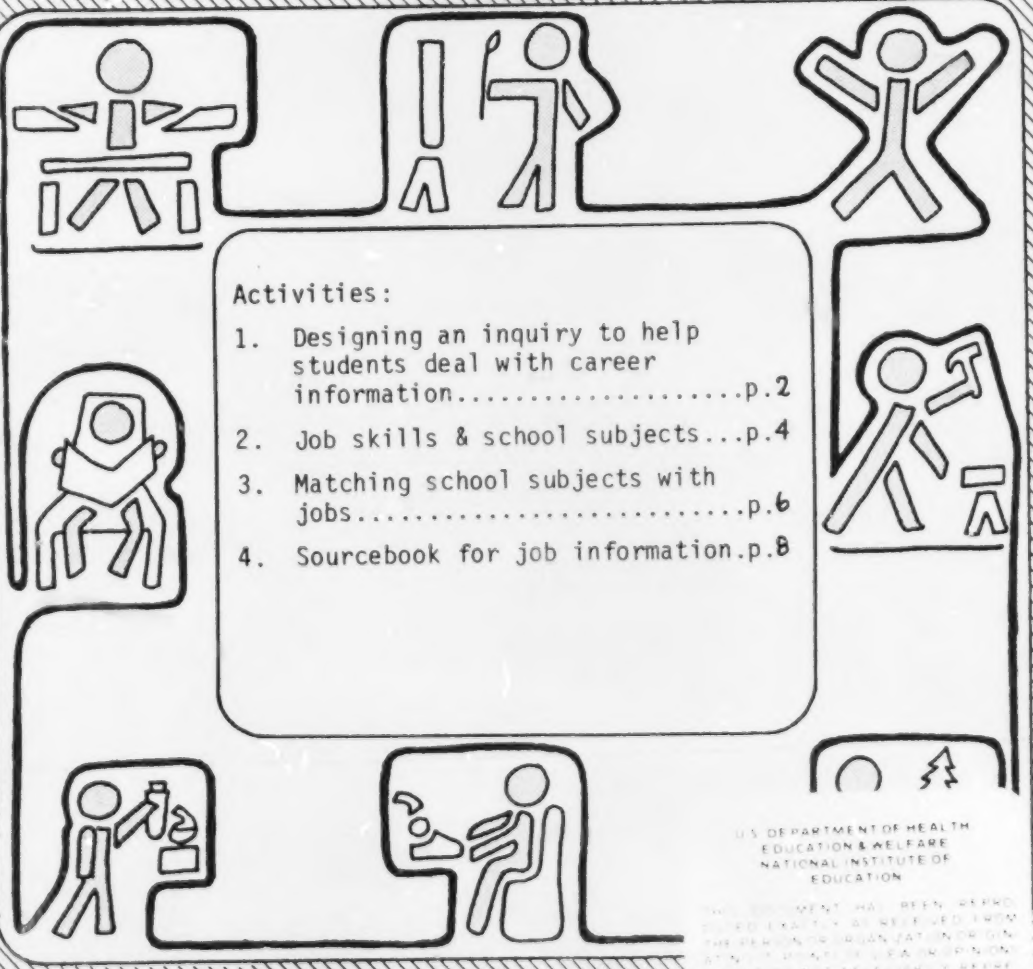
Competency #5: Adopt, modify or create material which will help students understand the relationship of language arts/science areas to careers.



Activities:

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2. Job skills & school subjects...p.4
3. Matching school subjects with jobs.....p.6
4. Sourcebook for job information.p.8

U.S. DEPARTMENT OF HEALTH EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

**SEVEN CAREER EDUCATION COMPETENCIES FOR LANGUAGE ARTS AND SCIENCE TEACHERS, GRADES 7 - 12**

THE TEACHER WILL BE ABLE TO:

1. Provide activities which enable students to clarify attitudes toward life roles and careers.
2. Help students understand and apply those skills needed to prepare them to seek, secure, and hold a job(s), as well as be able to adjust to job changes and demands.
3. Help students identify and use community resources which are related to their career development.
4. Create opportunities for parents to help their chilcren understand career education.
5. Adopt, modify, or create material which will help students understand the relationship of language arts/science areas to careers.
6. Instruct students in reading, writing, speaking and listening skills as they related to life roles and careers.
7. Assist students to evaluate stereotyped beliefs and make career choices in terms of abilities and interests.


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SPECIAL CREDIT:

Many of the sample activities used to complete the following packets were adapted/adopted from the Career Awareness/Exploration Curriculum Kits, Grades 4-8, 9-10 and 11-12, produced under contract with the Marion County ESD, Salem, Oregon in 1976-78. Credit has been given to the author of the activities used. The Career Awareness/Exploration Kits are available from:

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## TEACHING ACADEMIC SUBJECTS & CAREER EDUCATION

In Oregon, career education is built around the concept that each individual must learn to function effectively in six life roles: Citizen, consumer, family member, individual, learner, and producer. A major characteristic of Oregon's concept is that it is not a separate instructional program but is an intergral part of each curriculum area. Within the instructional and support programs, career education provides learners with experiences to develop attitudes, knowledge and skills, and to make effective choices that will enable them to perform successfully in the producer role, assist them in related life roles, and form a bridge between school and the world of work.

A comprehensive career education approach affects all grade levels, in all units and courses of study. Students can learn of possibilities of employment, but they also learn how a subject relates to other life roles that would provide them with a stimulating, emotionally rewarding lifestyle.

A major goal of any program ought to be to provide students with the reading, writing, listening, and other related communications skills which will enable them to function as effective human beings. To be an effective producer, each person must acquire and maintain a certain body of these skills. Students ought to have opportunities to understand the relationship between learning to read, write, speak and listen, and living, both in and out of school.

Through an understanding of career education concepts, all teachers can begin to identify and develop strategies for including career education within the scope of their programs. The following material is an attempt to offer suggestions and ideas to infuse these disciplines with career education activities.

TEACHER COMPETENCY V: ADOPT, MODIFY, OR CREATE MATERIAL WHICH WILL HELP STUDENTS UNDERSTAND THE RELATIONSHIP OF LANGUAGE ARTS/SCIENCE AREAS TO CAREERS.

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Students are currently expressing a desire for relevancy in education. Incorporating career education concepts into subject matter areas is one means of satisfying this request. The following activities demonstrate language arts and science skills can be related to careers.

**Title:**

DESIGNING AN INQUIRY TO HELP STUDENTS DEAL WITH CAREER INFORMATION

**Activity** 1

**Competency:**

# 5 Language Art/Science Careers

**Related Competencies:**

#1 Attitudes
#6 Communications

**Level:**

10-12/Teachers

**Instructional Goal:**

Given an opportunity to design an inquiry the teacher will be able to show students how question strategy can be used in dealing with career information.

**Number of People:**

Variable

**Time:**

Variable

**Materials/Resources:**

Inquiry Sample

**Procedures:**

1. The teacher will design an inquiry that will act as a model for students who are solving a problem that related to identifying various types of information concerning a career.

2. The teacher will identify the inquiry's objectives. The objectives could include some of the following: a) to have the students identify how knowledge arises from constantly changing data, b) to have the students devise a method of researching the problem, c) to have the students make hypotheses and draw conclusions from data, d) to have the students interpret data and identify the factors involved in the problem, etc.

3. The teacher will state the problem as related to the teacher's objectives.

4. The teacher will write a series of questions which may give the students some guidance in devising a research method, making hypotheses, drawing conclusions from data, etc.

5. The teacher will write the inquiry. The inquiry should include additional information to help the students investigate in depth the problem and the methods of research.

   On the next page is an example of an inquiry that could be used to help students with this process. The inquiry can be modified to meet new needs as they arise.

Source: John O'Donnell

A student has a reasonably high interest in pursuing medical technology as a future occupation. The student had not only a limited knowledge of the occupation's basic job facts (duties, tasks, working hours, etc.) but is also uncertain of the training and education which is necessary to become a medical technologist. The person wants to increase his/her amount of knowledge about this field of study but is not entirely sure what to do. What would you do to identify the training and skills necessary for this line of work?

(Student discussion is then encouraged by the teacher)

The student came to the conclusion that several avenues of investigation might be beneficial: 1) to ask a neighbor, who is a certified medical technologist, about the training necessary to be certified, 2) to seek and use brochures about the medical technology field, and 3) to seek information from a science teacher and a counselor at the student's school of attendance. The student suspects that some of the information that is obtained might not be current. The student also wonders if the course requirements and training listed in the brochure might not be too generalized to apply for some of the area hospitals that offer training in this field of study. What would you do to test these ideas?

(Student discussion is then invited by the teacher)

After obtaining the information from the three sources, the student discovered the following: 1) the neighbor, who offered information about med-tech training, was certified as a medical technologist in 1965, 2) the brochures about medical technology listed general requirements for most accredited schools of medical technology, and 3) the teacher and the counselor suggested that the student seek the information from a local teacher of health occupation class and a career information system that is in use by the local school district.

What do the three sources of information indicate?

Can you definitely conclude anything from this information?

How could you be more certain about the answers to your questions?

Are you certain from your investigation that you used the best sources of information?

Are other factors involved in the investigation that were unknown at the start?

What are some of the other factors that might change the direction of the investigation?

**Title:**

JOB SKILLS AND SCHOOL SUBJECTS

**Activity** 2

**Competency:**
#5 Language Arts/Science Careers

**Related Competencies:**
#6 Communications

**Level:**
7-9

**Instructional Goal:** Having participated in small group activity identifying job skills fitting a particular school subject area, the students will be able to participate in a class discussion explaining the relationship between school subject areas and job skills.

**Number of People:**
Total class

**Time:** Two or three 45-minute class periods

**Materials/Resources:**
Drawing paper or magazines

**Procedures:**

1. The teacher divides the class into small groups for beginning bulletin board activity. (3 or 4 in a group)
2. Each group selects one school subject area such as arithmetic, language arts, etc.
3. Each group cuts from magazines or draws pictures of the six life roles that relate to the school subject area they selected.
4. The bulletin board is sectioned off into school subject areas.
5. Each group will display their job skills in the proper school subject area. (See sample bulletin board for heading and picture ideas.)
6. The class will discuss the relationship of school subject areas and displayed job skills.

Source: Louis Cava
Janice Olson
John Young

Adapted by: Project Staff

ACTIVITY

(SAMPLE)

BULLETIN BOARD HEADING

AND

PICTURE IDEAS

| ARITHMETIC | LANGUAGE ARTS | SCIENCE |
|---|---|---|
| Picture of Doctor taking pulse | Boss giving instructions to worker | Game Warden |
| Housewife baking a cake | Secretary typing a letter | Farmer growing crops |
| Shopper comparing prices | Mother/Father talking to kids | Homeowner spraying shrubs |

Students can either draw pictures or cut pictures from magazines.

**Title:**

MATCHING SCHOOL SUBJECTS WITH JOBS

**Activity** 3

**Competency:**

#5 Language Arts/Science Careers

**Related Competencies:**

#6 Communications

**Level:**

7-9

**Instructional Goal:** After listing five job choices the student will be able to indicate, through writing, how his school subject skills contribute to those jobs and the, through writing, indicate present level of skill development in the five jobs selected.

**Number of People:**

Total class
Individual

**Time:**

One 45-minute Class period

**Materials/Resources:**

None.

**Procedures:**

1. The students will choose 5 jobs of their choice.
2. The students will list their class subjects under each job title and indicate the general skills each subject contributes to the job.
3. The student will indicate his present level of skill development.
4. Discussion may follow to share ideas.

Source: Louis Cava
Janice Olson
John Young

Adapted by: Project Staff

ACTIVITY #3

(SAMPLE)

JOB SKILL SHEET

Job: Carpenter

| School Subject | Level of Skill Required For This Job | Level of skill I have at this time (To Match Required Skills) |
|---|---|---|
| 1. Arithmetic (Math) | A. Measure to 1/16" | A. I can measure to 1/8" only |
| | B. Figure board feet | B. I cannot figure board feet |
| 2. Reading | A. | A. |
| | B. | B. |
| | Continue until all the students' subjects have been used. | |

**Title:**
Sourcebook for Job Information

**Activity** 4

**Competency:**
#5 Language Arts/Science Careers

**Related Competencies:**
#2 Job skills
#3 Community Resources

**Level:**
7-12

**Instructional Goal:**
Given the D.O.T. and the Occupational Outlook Handbook, the student will complete the Job Description Chart for two language arts and science related careers.

**Number of People:**
Total class

**Time:**
Two classes

**Materials/Resources:**
CIS Needle-Sort and computer terminal
D.O.T. , Job Description Chart
Occupational Outlook Handbook

**Procedures:**

1. The teacher should present the D.O.T. and the Occupational Outlook Handbook and explain fully their format and content.

2. Students should complete quest activity of CIS or needle-sort.

3. The teacher should distribute copies of the Job Description Chart.

4. Using CIS data and other career information materials, students will complete the chart for two language arts and two science related careers.

5. (Optional) Students may write comparison contrast paragraphs on two of the jobs or may compare/contrast requirements for language arts jobs with those of science jobs.

Developed by: Dennis Crow and Ruth Kostur

COMPETENCY V, Activity 4

Name: _____

| | JOB | JOB |
|---|---|---|
| Long range | | |
| Hours of work | | |
| Vacation | | |
| Union or License | | |
| Education Required | | |
| H.S. Courses | | |
| Outlook over 10 years | | |
| Disadvantages | | |
| Opportunity for Advancement | | |
| Available Training | | |
| Location of Job | | |
| Fringe Benefits | | |
| Personal Qualities | | |
| Retirement | | |

(Taken from Handbook for Implementing the Career Information System. Eugene: Oniversity